

REMARKS

Claims 21-40 remain in this application.

Claim 21 has been amended to make it absolutely clear that the reforming system has no further control structure between the metering pump and the evaporating device.

THE FINALITY OF THE REJECTION WAS PREMATURE

AND SHOULD BE WITHDRAWN

In the rejection of November 16, 2007, the examiner rejected claims 25 and 26 under 35 USC 102 as anticipated by Ruoff et al, and now in the Final Office action he has changed to a rejection under 35 USC 103 as unpatentable over Ruoff et al, saying it would have been obvious to make the metering pump an electric pump. The examiner has thus changed his interpretation of Ruoff et al. In the prior action of November 16, 2007, by rejecting claims 25-26 under 35 USC 102, the examiner was saying that Ruoff et al taught an electric motor driven pump, but now he is saying that the change to an electric motor driven pump would have been obvious.

Contrary to the examiner's statement in the Final Rejection at paragraph 9, this is not a change in the rejection which was necessitated by changes to the claims. Note that claim 25 recites, "wherein the first and second fuel pumps are electric fuel pumps" and claim 26 recites, "wherein the first pump is an electric fuel pump." Claims 25 and 26 have both recited "electric fuel pump(s)", right from their first insertion into the application via the preliminary amendment of September 24, 2004. Neither claim has been amended. And further, the

claim(s) on which claims 25 and 26 depend have not been changed with respect to the pumps being driven by an electric motor. These two claims have recited the structure of electric fuel pump(s) right through each and every rejection the examiner has made for them. Thus the examiner's change from saying that Ruoff et al has all of the structure of claims 25 and 26, i.e. a rejection under 35 US 102, to the position that electric fuel pumps would have been obvious, is a change in the examiner's position which was **not necessitated** by any amendment to the claims. Claims 25 and 26 have in no way changed in regard to the pump(s) being electric fuel pump(s).

Accordingly, the change of the examiner's position as stated in the Final rejection is apparently a change in the examiner's understanding of the reference to Ruoff et al, and is not a change which was necessitated by any changes to claims 25 and 26. Accordingly, this change in the rejection, which is a change in the interpretation of the reference to Ruoff et al, is sufficient reason as to why the Finality of the present rejection was improper and should be withdrawn.

Additionally, in the rejection of claims 25 and 26, the examiner now has relied on Riple as evidence that the modification to an electric motor driven pump is an obvious step. Thus, not only has the examiner changed his position as to exactly what is taught by the reference to Ruoff et al, but additionally the examiner's position in the present rejection is not clearly stated. It is not clear if this rejection is based on one reference, or two. Is the examiner saying it would be obvious to modify Ruoff et al in view of the teachings of Riple?

FURTHER COMMENTS

Regarding the prior art rejection of claims 21, 24, 27-30, 34, and 40, claim 21 specifies the use of two pumps, one of which precisely meters the raw fuel which goes to the evaporating device. And this pump is recited in claim 21 to be a “metering pump **whose rpm is regulated by means of the control unit (8)** so as to **precisely meter** the quantity of raw fuel which is delivered to the evaporating device.” This is structure which the reference to Ruoff et al clearly does not have.

Contrary to this claimed arrangement, Ruoff et al have a pump 21, but pump 21 is not a metering pump which is controlled to precisely meter the fuel which is passed to the evaporating unit.

Thus clearly Ruoff et al does not have a teaching of the control unit as recited in claim 21, nor does Ruoff et al include any teaching of the function of the control unit precisely controlling the metering pump as recited in claim 21.

Rather, pump 21 of Ruoff et al is operated at a constant rpm, see column 5 line 2. The metering in Ruoff et al is done by a metering valve 22, see column 4 lines 61, 62, 66, column 5 line 4-6, and various other locations in Ruoff et al. Moreover, at column 4 lines 60-65 Ruoff et al recite that pump 21 not only supplies metering valve 22, but also metering valves 23, four of which are shown in figure 2. At column 5, lines 1-6, Ruoff et al go on to state that pump 21 is “operated at a constant rpm whereby a backflow into the supply tank 20 takes place via bypass 25 and pressure controller 26.” Thus in Ruoff et al pump 21 does not precisely meter the fuel which is passed to the evaporating unit, and there is no control unit

which can precisely control it. In Ruoff et al, between the pump 21 and the evaporator 4 is a metering valve 22 which does the precise metering, and there is no control unit which regulates the metering pump to precisely control the amount of fuel passed to the evaporator unit.

Thus clearly Ruoff et al does not have the structure which is recited in claim 21.

Claim 21 recites that the metering is done by the pump and also recites a control unit which operates to control the rpm of the metering pump. See claim 21 at lines 7-9 which state “said at least two pumps including at least one metering pump whose rpm is regulated by means of the control unit (8) so as to precisely meter the quantity of raw fuel which is delivered to the evaporating device...” Ruoff et al simply does not have this structure.

Furthermore, claim 21 goes on to recite in lines 9-10, “the reforming system having no further control structure between the metering pump and the evaporating device”. And this recitation also is clearly **not true** for Ruoff et al, because between the pump 21 and the evaporating device is a metering valve 22.

Moreover, not only does Ruoff et al indicate at column 5 line 2 that pump 21 is operated at a constant rpm, but additionally at column 6 lines 40-45, Ruoff et al go on to clearly indicate their desire **not** to use a metering pump for pump 21.

The examiner has pointed out that in column 3, lines 18-23 of Ruoff et al indicate that the pump (21) is controllable to provide sufficient fuel, but not oversupply fuel so that energy is not wasted. However, this is not a teaching of a pump with the above features being controlled by a **control unit** as specified in claim 21. If the entire disclosure of Ruoff et al is

considered, it becomes clear that this is a recitation of the pump 21 being operated to supply slightly more fuel than is required by the evaporating device and also the devices fed by additional metering valves 23, plus also feed sufficient fuel to the bypass line 25 so that pressure controller 26 can maintain a constant pressure for metering valve 22. The structure necessary for the operation of Ruoff et al is not the same as a control unit which controls the rpm of a metering pump to precisely meter the fuel supplied to the evaporating unit.

Moreover, in spite of the recitation by Ruoff et al at column 3 lines 18-23, the control valve 22 is still a necessary control element. In both of figures 2 and 3, the system of Ruoff et al simply would not have a proper metering of the fuel without control valve 22. Not only that, but in the immediately following lines, column 3 lines 24-30 to be precise, Ruoff et al go on to recite the pressure controller in the return line which keeps the pressure constant. The recitation in Ruoff et al of return line, plus pressure controllers 26, 34 and 37 keeping a desired pressure, clearly argues away from a metering pump and its control unit which together precisely controls the rpm of the pump to deliver a precise amount of fuel to the evaporating unit. In Ruoff et al the pump(s) must provide sufficient fuel so as to allow these pressure controllers to return at least some of the fuel to the supply so that pressure controllers 26, 34 and 37 can maintain a constant pressure.

Ruoff et al provide more than enough indications that they had no intention whatsoever that their device should use a metering pump with its control unit as the **precise** control of the fuel being delivered to the evaporating unit. And this is contrary to the limitations which are recited in the claims of this application.

Thus, clearly the examiner's rejection of claims 21, 24, 27-30, 34, and 40 under 35 USC 102 is not appropriate.

The examiner has rejected claims 22 and 23 as unpatentable over Ruoff et al (in view of Riple?), saying that the recited manner of operating the pump does not carry patentable weight. But it is pointed out that claim 21 includes specific recitation of the control unit which controls the rpm of the pump so that the output is precisely metered. This recitation in claim 21 defines definite structure which is different from the structure of either the reference to Ruoff et al, or the structure of Riple.

And claims 22, 23, 25 and 26 add to these recitations of the specifics of the structure of the pumps, which specifics are not found in either of these references.

Thus, claims 22, 23, 25 and 26 add even further limitations to the patentable structure which is recited in claim 21.

The examiner has also rejected claim 33 as unpatentable over Ruoff et al in view of McArthur. But again, McArthur does not supply the missing structural limitations which as pointed out above are recited in claim 21 but are missing from Ruoff et al. Thus McArthur cannot be combined with Ruoff et al to make these claims obvious to one skilled in the art, since this combination of prior art applied still does not teach all of the limitations which are recited in the claims. In particular, the combination of Ruoff et al and McArthur still does not teach a metering pump which precisely meters the fuel which is supplied to the evaporating unit, the combination of prior art still requires the additional structure of metering valve 22.

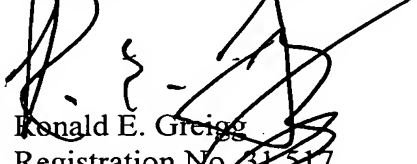
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And there are no teachings of record in any of the prior art which could make the addition of control of the metering pump by the control unit obvious to one skilled in the art.

Moreover, it is pointed out that the structure which is now recited in claim 21, the structure which as pointed out above is not present in the prior art, is also the structure which allows this invention to gain the advantages as recited in the specification at paragraphs 13-18.

For all of the above reasons, taken singly or in combination with one other, entry of this amendment and allowance of the claims are courteously solicited.

Respectfully submitted,


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